



## INTEROFFICE CORRESPONDENCE



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GROUP	ACT	INFO
11000 ERM		
11010 PIR		
11100 RPM	Busby	X
11200 ES&E		
11300 SPP		
11400 FOM		
11500 RLD		
11600 SM		
11700 COS		

DATE: July 13, 1993

TO: Distribution

FROM: J. L. Anderson, Radiological Engineering, Bldg. 080, X6974

SUBJECT: RADIOACTIVE MATERIAL CONCERNS IN OPERABLE UNIT 7, THE CURRENT  
LANDFILL - JLA-016-93

- Refs:
- (a) Department of Energy Radiological Control Manual, DOE/EH-0256T
  - (b) Code of Federal Regulations, 40 CFR 268, Land Disposal Restrictions
  - (c) J. L. Anderson ltr, JLA-010-93, to Distribution, Surveillance of Well Abandonment Project, June 07, 1993
  - (d) Historical Release Report, PAC Reference Number: NW-114, June 1992
  - (e) Final Draft Report: Reconstruction of Historical Rocky Flats Operations & Identification of Release Points, Colorado Department of Health, Phase 1 of Project Tasks 3 & 4
  - (f) Technical Memorandum Number 2, Human Health Risk Assessment of Present Landfill (IHSS 114), Environmental Management Department, December 16, 1992

This memorandum is to document concerns that have arisen affecting the disposal of the leachate that is collected from the current landfill.

Radiological Engineering (RE) first became aware of the spray evaporation of the landfill pond on June 07, 1993 while performing a site inspection of a drill site for the Well Abandonment and Replacement Project (WARP). There was a large cloud of mist originating from the southeast side of the landfill pond that was drifting downwind with the prevailing breeze. These observations were originally reported in Reference (c).

Subsequent investigations revealed that the spraying of the leachate was being done by the Surface Water Division as a method of controlling water level in the landfill pond. The spray nozzles are located within Individual Hazardous Substance Sites (IHSS) 167.1, 167.2, and 167.3. The current spray is being discharged from the nozzles located in IHSS 167.3 which has elevated plutonium levels of approximately three times the surrounding background levels.

ADMIN RECORD

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Further inquiries to Surface Water Division revealed that the spraying was being done under a Department of Energy (DOE) letter of authorization that was signed in April of 1993.

RE has conducted a background records search of the current landfill and found that there have been many documented burials of radioactive materials there [References (d) and (e)]. In accordance with Reference (a), the DOE Radiological Control Manual, we have determined that the landfill meets the requirements of an Underground Radioactive Material Area as defined in Section 237. It is Radiological Engineering's intention to post the landfill as such in accordance with the Rocky Flats Site Radiological Control Manual Implementation Plan schedule.

Reference (d) states that there are 97 hazardous waste streams buried along with the radioactive materials in the landfill. This should make the current landfill a hazardous mixed waste site under the 40 CFR Regulations. Any leachate that is generated from a hazardous waste landfill has been assigned the Environmental Protection Agency (EPA) identification number of F039 per 40 CFR 261.31. Reference (f) shows that the landfill pond was designed to collect any leachate generated in the landfill, lower the landfill water level, and contain any contaminated surface water runoff. Under the Resource Conservation Recovery Act's (RCRA) mixture rule for listed wastes, the whole pond could be considered F039 waste regardless of the current concentrations of the contaminants of concern.

Under RCRA Land Disposal Restrictions, 40 CFR 268.35:

(d) "Effective May 8, 1993, hazardous wastes listed in 40 CFR 268.10, 268.11, and 268.12 that are mixed radioactive/hazardous wastes, and soil or debris contaminated with hazardous wastes listed in 40 CFR 268.10, 268.11, and 268.12 that are mixed radioactive/hazardous wastes, are prohibited from land disposal."

The 97 waste streams that are buried in the current landfill should be examined to see if any of them fall under the LDR restrictions. A determination also needs to be made to ascertain if the leachate should be considered mixed waste since the source that is generating it is a mixed radioactive/hazardous waste source.

Please contact me at Extension 6974 or Digital Page 3518 with any concerns or questions relating to this correspondence.

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